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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,399	09/10/2003	Gilbert Gugler	ICH 299-US	5850
7590 01/06/2005			EXAMINER	
Dara L. Onofrio, Esq., c/o ONOFRIO LAW Suite 1600 1133 Broadway New York, NY 10010			BAREFORD, KATHERINE A	
			ART UNIT	PAPER NUMBER
			1762	
DATE MAILED: 01/06/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/660,399

Applicant(s)

GUGLER ET AL.

Examiner

Katherine A. Bareford

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features of claims 15-18 as to the channels in the grooves must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

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2. The disclosure is objected to because of the following informalities: page 4, line 16, "und" should apparently be "and".

Appropriate correction is required.

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).

Correction of the following is required: the features of claims 6 and 7 need to be inserted into the specification. Page 3, lines 20-25 provides a groove width of 4-11 mm with a preferred width of 6-9 mm, not 4-15 mm and 6-8 mm as claimed in claims 6 and 7.

4. The use of the trademark TEFLON (page 5, lines 10-12) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 2, as worded, it is unclear if "a lateral flow liquid" is also the coating solution or not.

Claim 1, line 3, "the curtain" and "the lateral guides" lacks antecedent basis.

Claim 5, line 1, this apparatus claim should be made independent of the method claim, as an apparatus claim should not depend from a method claim. See MPEP 2173.05 (p).

Claim 5, line 4, "a lower end" should be clarified that the lower end of the guides is referred to.

Claim 5, lines 5-6, "the horizontal line" lacks antecedent basis.

Claim 14, line 2, the claim contains the trademark/trade name TEFLON. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a coating material and, accordingly, the identification/description is indefinite.

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The other dependent claims do not cure the defects of the claims from which they depend.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 5-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Independent claim 5 claims both a method and an apparatus, and thus is directed to neither a "process" nor a "machine". See MPEP 2173.05(p).

The other dependent claims do not cure the defects of the claims from which they depend.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-6, 8, 10 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 03/049870 A1 (hereinafter '870) in view of EP 1 023 949 A1 (hereinafter '949).

The Examiner notes that the effective filing date of '870 for the purposes of this examination is Dec. 13, 2001, as '870 is an international application filed under the treating defined in section 351(a) as it is filed after Nov. 29, 2000; designates the US; and was published in English. Furthermore, priority extends back to the priority date of Dec. 13, 2001, as the material used is in the provisional US application.

'870 teaches a method of curtain coating a moving web with at least one coating solution. Figure 1 and page 14. Lateral, or edge, guides are provided on the edges of the curtain. Figures 2-6 and pages 14-15. A lateral auxiliary flow of liquid is supplied in a groove in the edge guides. Figures 2-6 and pages 20-21 (the "contact area 30" bound by protrusions 36 corresponds to the claimed "groove"). The groove is perpendicular to the lateral extension of the curtain. Figures 1-6. The edge guides have lower ends. Figures 2-3 and page 20. The edge guide system stabilizes the curtain on both sides. Page 20.

Claim 5: exit slits are provided above the edge guides to supply the lateral flow of liquid perpendicular to the lateral extension of the groove. Page 19-20. The edge guides have a lower end. Figures 2-3 and page 20. The lower ^{end} ~~had~~ has a downward protruding edge as claimed, since

VS

end
A

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by claim 8, α can be 90 degrees and by claim 10 β can be 90 degrees, providing that a lower end of rectangular shape can be used. Figures 2-3 and page 20.

Claim 6: the width of the groove can be 10 mm. Page 20.

Claim 8: α can be 90 degrees. As shown by figures 2-3.

Claim 10: β can be 90 degrees. As shown by figures 2-3.

Claim 15: the groove has channels arranged in the direction of the falling curtain.

Figures 2-6 and page 20 (the "grooves" provide "channels" as claimed).

Claim 16: the channels can have a triangular profile. Figure 5 and page 20.

Claim 17: the distance between the channels can be 500 microns (0.5 mm). Page 20.

'870 teaches all the features except (1) coating all liquid on the moving web without separating before application (claims 1, 2, 5), (2) the height of the guides (claims 3, 4), (3) the distance between channels and depth of channels as claimed (claims 17-18).

'949 indicates that when performing a curtain coating of a moving web with at least one coating solution, it is desirable to use edge guides. Abstract and figure 4. When using the edge guides, all materials (coating and edge liquids) can be applied onto the web without separating before contact. Figure 4 and abstract. Then the auxiliary liquid can be removed, after application onto the web. Figure 4.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify '870 to use the edge guide system to apply all liquid on the moving web without separating before application as suggested by '949 in order to provide a desirable coating, because '870 teaches using an edge guide system with grooves to apply liquid to a moving web by curtain

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coating, and '949 teaches that when using a edge guide system to apply liquid to a moving web by curtain coating, it is desirable to apply coating and edge liquids all to the web and then remove edge liquids after application. It would further have been obvious to perform routine experimentation to optimize the distance between the web and the edge guides so as to minimize the distance so as to keep the curtain uniformity provided by the edge guides, but not damage the web or applied coating. It would further have been obvious to perform routine experimentation to optimize the distance between channels and the depth of the channels, given an optimal channel distance and angle.

11. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over '870 in view of '949 as applied to claims 1-6, 8, 10 and 15-18 above, and further in view of Oki et al (US 6454858).

'870 in view of '949 teaches all the features of these claims except the undersurface material of PTFE (polytetrafluoroethylene or TEFLON).

However, Oki teaches that it is known to make edge guides for curtain coating from PTFE. Figure 1, column 2, lines 30-55, and column 13, lines 45-50. Oki also teaches that it is known to make edge guides of such materials as polyvinyl chloride or steel, and to make connecting width regulating plates from PTFE. Column 14, lines 40-45.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify '870 in view of '949 to use the edge guide system of with at least a backing PTFE/TEFLON in order to provide a desirable coating, because '870 in view of '949 teaches

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using an edge guide system with grooves to apply liquid to a moving web by curtain coating, and Oki teaches that when using a edge guide system to apply liquid to a moving web by curtain coating, it is desirable to provide the area next to the edge guide contacting the liquid (the width regulating plate) from PTFE when then edge guide is a material such as PVC. As a result, it would have been obvious to make the backing of the edge guide of PTFE so that only the face of the edge guide is the non-PTFE material.

Allowable Subject Matter

12. Claims 7, 9 and 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The cited prior art does not teach or suggest the width of the groove of claim 7, or the angles of claims 9 and 11.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine A. Bareford whose telephone number is (571) 272-1413. The examiner can normally be reached on M-F(6:30-4:00) with the First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P. Beck can be reached on (571) 272-1415. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and for After Final communications.

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Other inquiries can be directed to the Tech Center 1700 telephone number at (571) 272-1700.

Furthermore, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kath BRF
KATHERINE BAREFORD
PRIMARY EXAMINER